

WHAT IS CLAIMED

1. A method of treating brass articles to reduce leachable lead therein which comprises the steps of: contacting a brass article with a primary treatment solution to reduce leachable lead therein, the primary treatment solution comprising an aqueous caustic solution containing a chelating agent; and contacting the brass article with a post-treatment solution after being contacted with the primary treatment solution, said post-treatment solution comprising an aqueous solution containing an azole.

2. A method of treating brass articles to reduce leachable lead therein according to Claim 1, wherein the chelating agent is selected from the group consisting of phosphonic acids, aminopolycarboxylic acids and mixtures thereof.

3. A method of treating brass articles to reduce leachable lead therein according to Claim 1, wherein the chelating agent is selected from the group consisting of ethylenediaminetetraacetic acid, N-hydroxyethylethylene-diaminetriacetic acid, diethylenetriaminepentaacetic acid and mixtures thereof.

4. A method of treating brass articles to reduce leachable lead therein according to Claim 1, wherein the caustic solution includes a caustic component selected from the group consisting of an alkali metal hydroxide, an alkali metal carbonate, an alkali metal phosphate and mixtures thereof.

5. A method of treating brass articles to reduce leachable lead therein according to Claim 1, wherein the brass article is sonicated during contact with the primary treatment solution.

6. A method of treating brass articles to reduce leachable lead therein according to Claim 1, wherein the brass article is contacted with a pretreatment solution

prior to being contacted with the primary treatment solution, said pretreatment solution comprising an aqueous solution containing sodium persulfate.

7. A method of treating brass articles to reduce leachable lead therein according to Claim 6, wherein the brass article is sonicated during contact with the pretreatment solution.

8. A method of treating brass articles to reduce leachable lead therein according to Claim 1, wherein the post-treatment solution is at a temperature of about 120 degrees Fahrenheit.

9. A method of treating brass articles to reduce leachable lead therein according to Claim 1, wherein the azole is selected from a group consisting of mercaptobezothiazole, benzotriazoles, and tolytriazole.

10. A method of treating brass articles to reduce leachable lead therein which comprising the step of: contacting a brass article with a treatment solution comprising an aqueous solution containing an azole.

11. A method of treating brass articles to reduce leachable lead therein according to Claim 10, wherein the treatment solution is at a temperature of about 80-120 degrees Fahrenheit.

12. A method of treating brass articles to reduce leachable lead therein according to Claim 10, wherein the azole is selected from a group consisting of mercaptobezothiazole, benzotriazoles, and tolytriazole.

13. A method of treating brass articles to reduce leachable lead therein according to Claim 10, wherein the treatment is followed by a 70 degree Fahrenheit water rinse.

14. A method of treating brass articles to reduce leachable lead therein according to Claim 13, wherein the 70 degree Fahrenheit water rinse is followed by a 150 degree Fahrenheit ultrasonic water rinse.

15. A method of treating brass articles to reduce leachable lead therein according to Claim 14, wherein the 150 degree Fahrenheit ultrasonic water rinse is followed by an azole rinse at 120 degree Fahrenheit.

16. A method of treating brass articles to reduce leachable lead therein according to Claim 10, wherein subsequent to contacting a brass article with a treatment solution comprising an aqueous solution containing the azole, the brass article is contacted with water.

17. A method of treating brass articles to reduce leachable lead therein according to Claim 16, wherein the water is at a temperature of about 80 to about 140 degrees Fahrenheit.

18. A method of treating brass articles to reduce leachable lead therein according to Claim 16, further comprising the step of contacting the brass article again with water at about 80 to about 140 degrees Fahrenheit.

19. A method of treating brass articles to reduce leachable lead therein according to Claim 16, wherein the water is reverse osmosis water.

20. A method of treating brass articles to reduce leachable lead therein according to Claim 16, further comprising the step of contacting the brass article with an about 0.5 to about 5 percent benzotriazole solution.

21. A method of treating brass articles to reduce leachable lead therein according to Claim 20, wherein the about 0.5 to about 5 percent benzotriazole solution is at a temperature of about 80 to about 140 degrees Fahrenheit.

22. A method of treating brass articles to reduce leachable lead therein according to Claim 20, further comprising the step of contacting the brass article with the about 0.5 to about 5 percent benzotriazole solution for about 3 to about 15 minutes.

23. A method of treating brass articles to reduce leachable lead therein according to Claim 21, further comprising the step of contacting the brass article with the about 0.5 to about 5 percent benzotriazole solution being subsequent to a water rinse.

24. A method of treating brass articles to reduce leachable lead therein according to Claim 20, further comprising the step of contacting the brass article again by water subsequent to contacting the brass article with the about 0.5 to about 5 percent benzotriazole solution.

25. A method of treating brass articles to reduce leachable lead therein according to Claim 24, wherein the water is reverse osmosis water.